# Can memantine prevent memory impairment induced by MDMA in humans.

No registrations found.

| | |
|---|---|
| **Ethical review** | Not applicable |
| **Status** | Pending |
| **Health condition type** | - |
| **Study type** | Interventional |

## Summary

### ID

NL-OMON29601

**Source**
Nationaal Trial Register

**Brief title**
MEM-MDMA

**Health condition**

MDMA incuded memory impairment

### Sponsors and support

**Primary sponsor:** Maastricht University
**Source(s) of monetary or material Support:** NWO

### Intervention

### Outcome measures

#### Primary outcome

Memory performance is the primary outcome and is measured immediately after each cannabis/placebo treatment. Memory is measured with a verbal memory test and a prospecitve memory test.

#### Secondary outcome

Event related potentials are measured while performing the verbal memory tast. P300 will be the outcome measure of the Event related potentials. Measurable and perceptual differences in speech will be studied between MDMA-influenced and non-intoxicated speech.

# Study description

### Background summary

Previous studies showed that ecstacy (MDMA) affects cognitive performance, such as memory. Animal studies have shown that memantine, a drug used in the treatment of alzheimer patients, can prevent the memory problems caused by ecstacy.

This will be a double blind, placebo controlled, 4-way cross over design. Subjects will be pretreated with placebo or memantine. Two hours later they will be treated with placebo or MDMA. In between test days, a wash-out period of at least a week will be respected.

### Study objective

It is predicted that pretreatment with memantine can prevent the memory impairment that is usualy caused by MDMA.

### Study design

Subjects will be pretreated with placebo or memantine. Two hours later they will be treated with placebo or MDMA.

### Intervention

1. Placebo - Placebo;

2. Memantine 20 mg - Placebo;

3. Placebo - MDMA 75 mg;

4. Memantine 20 mg - MDMA 75 mg.

# Contacts

**Public**
E.L. Theunissen
Maastricht

The Netherlands
**Scientific**
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# Eligibility criteria

## Inclusion criteria

1. Recreational MDMA users;

2. Age between 18 and 40 years;

3. Free from psychotropic medication;

4. Good physical health;

5. Absence of any major medical, endocrine and neurological condition;

6. Normal weight;

7. Written Informed Consent.

## Exclusion criteria

1. History of drug abuse (other than the use of MDMA) or addiction;

2. Pregnancy or lactation;

3. Excessive drinking;

4. Hypertension;

5. Current or history of psychiatric disorder.

# Study design

### Design

| | |
|---|---|
| Study type: | Interventional |
| Intervention model: | Crossover |
| Allocation: | N/A: single arm study |
| Masking: | Double blinded (masking used) |
| Control: | Placebo |

### Recruitment

NL

| | |
|---|---|
| Recruitment status: | Pending |
| Start date (anticipated): | 01-04-2011 |
| Enrollment: | 16 |
| Type: | Anticipated |

## Ethics review

Not applicable

| | |
|---|---|
| Application type: | Not applicable |

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

| Register | ID |
|---|---|
| NTR-new | NL2664 |
| NTR-old | NTR2792 |

| Register | ID |
| --- | --- |
| Other | MEC Maastricht University : 11-3-007 |
| ISRCTN | ISRCTN wordt niet meer aangevraagd. |

# Study results

**Summary results**
N/A